

REMARKS

Applicant submits this Amendment in response to the Office Communication mailed on September 24, 2008.

In the Office Communication, the Examiner alleged that “[t]he reply filed on July 21, 2008, is not fully responsive to the prior Office Action.” Office Communication at page 2. Specifically, the Examiner asserted that “[t]he Applicant’[s] reply fails to particularly point out the support in the original disclosure for newly presented claims 92, 97, [and] 98 . . . and also lacks a listing of claims readable on the elected species.”

By this Amendment, Applicant amends claims 92 and 97, and cancels claim 98 without prejudice or disclaimer. Applicant reserves the right to present the subject matter of the cancelled claim at a later date. Claims 60-62, 64, 66-68, and 83-97 are currently pending. Of these claims, claims 83, 85, 87, 91, and 95 are independent.

Applicant would like to thank Examiner Willse for the courtesies extended to Applicant’s representative during the telephonic interview of March 23, 2009. The substantive matters discussed during the interview are incorporated in the remarks set forth below. Further, Examiner Willse indicated that the amendments submitted on July 21, 2008, have been entered and made of record, and that any future amendments should be made relative to the claims presented on July 21, 2008.

As an initial matter, Applicant respectfully submits that each of the claims 60-62, 64, 66-68, and 83-98 in the Amendment filed on July 21, 2008 (hereinafter “the Amendment”), which is attached to this Reply and the contents of which are incorporated herein by reference, is “readable” on the elected species, i.e., Species Ie, IIc, and IIc (Figs. 9, 17, and 21, collectively). See Amendment and Response to Restriction and Election of Species Requirements filed on January 22, 2003.

Nonetheless, solely in order to expedite the prosecution of this application, Applicant has cancelled claim 98, and amended claims 92 and 97 to clarify the claimed subject matter. Therefore, Applicant respectfully requests examination of all of the currently pending claims 60-62, 64, 66-68, and 83-97.

With regard to the newly presented claims, including pending claims 92 and 97, Applicant submits that each of these claims is fully supported by the originally-filed drawings and corresponding written disclosure. Support for the pending claims can be found at least in Figure 9 and the corresponding written disclosure. For example, each of claims 92 and 97 is fully supported by Figure 9 and the corresponding written disclosure. In particular, claim 92 requires that “a second end of the elongate member is connected to the mitral valve, and the first end of the elongate member contacts the wall surrounding the chamber.” Claim 97 similarly requires that “a second end of the elongate member is connected to the mitral valve.” Each of these claim limitations is fully supported by at least Figure 9 and the corresponding written disclosure.

As shown in Fig. 9 of the originally-filed disclosure, for example, each of tension members 224 includes a first end secured to a chamber wall. Indeed, Paragraph [0039] explains that the Figure 9 embodiment includes “tension members 224 [that] extend from a basal anchor 222 to an adjacent secondary anchor point. The secondary anchor point is established by transverse extension of a tension member 225 across left ventricle 10. Tension member 225 is anchored transmurally to the heart wall”

As also shown in Figure 9, each of tension members 224 further includes a second end secured to a basal anchor 222. As taught by the disclosure of the originally-filed application, basal anchor 222, like the other disclosed basal anchors

(e.g., basal anchor 22) may be connected to valve 14. See, for example, Paragraphs [0033] and [0037]. In particular, Paragraph [0033] explicitly teaches that "like reference numerals refer to like elements throughout the several views." Paragraph [0037] further teaches that "[t]he annulus of valve 14 can be decreased in size by drawing the annulus toward the suture ring by the sutures used to **connect ring 22 to the valve**. (Emphasis added.) Therefore, the second end of each of tension members 224 is connected to the valve via basal anchor 222, as required by each of claims 92 and 97.

For at least these reasons, Applicant respectfully requests the Examiner's reconsideration and the entry of the Amendment, reconsideration and reexamination of this application, and the timely allowance of the pending claims.

Should the Examiner wish to discuss this Amendment, or have any questions or concerns, he is invited to telephone the undersigned at (202) 408-4221.

Please grant any extensions of time required to enter this Amendment and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: March 23, 2009

By: 

Dinesh N. Melwani

Reg. No. 60,670

Attachments: Amendment filed on July 21, 2008

PATENT
Customer No. 22,852
Attorney Docket No. 7528.0003-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
Todd J. Mortier et al.)	Group Art Unit: 3738
)	
Application No.: 09/981,790)	Examiner: Willse, D. H.
)	
Filed: October 19, 2001)	
)	
For: VALVE TO MYOCARDIUM)	Confirmation No.: 6743
TENSION MEMBERS DEVICE)	
AND METHOD)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

AMENDMENT

In reply to the final Office Action mailed on April 18, 2005, and further to the Board of Patent Appeals and Interferences' Decision on Appeal dated May 21, 2008, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims beginning on page 2 of this paper.

Remarks follow the amendment section of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-59. (Cancelled)

60. (Currently Amended) The method of claim ~~[[59]]~~ 83, wherein positioning the device further includes anchoring another end of the elongate member proximate the annulus of the valve.

61. (Currently Amended) The method of claim ~~[[59]]~~ 83, wherein the at least one elongate member includes a tension member.

62. (Currently Amended) The method of claim ~~[[59]]~~ 83, wherein the at least one elongate member includes a plurality of elongate members.

63. (Cancelled)

64. (Previously Presented) The method of claim 83, wherein the heart structure includes a wall of a heart chamber.

65. (Cancelled)

66. (Previously Presented) The method of claim 83, wherein altering the geometry of the heart structure includes altering at least one of a transverse radial dimension and vertical dimension of a heart chamber during at least a portion of the cardiac cycle.

67. (Previously Presented) The method of claim 66, wherein altering at least one of the transverse radial dimension and vertical dimension includes reducing at least one of the transverse radial dimension and vertical dimension.

68. (Previously Presented) The method of claim 83, wherein positioning the device includes positioning the device so as to alter a position of at least one papillary muscle associated with the valve.

69-82. (Cancelled)

83. (Currently Amended) A method of treating an in situ mitral valve, the method comprising:

positioning a passive device with respect to a heart such that, throughout the cardiac cycle, a portion of the device contacts and passively alters a geometry of heart structure other than leaflets, chordae, papillary muscles, and an annulus associated with the in situ mitral valve, wherein the passive device draws together leaflets of the in situ valve to promote closure of the in situ valve, and wherein positioning the device includes extending at least a portion of at least one elongate member within a chamber

of the heart and anchoring an end of the at least one elongate member to one of a wall surrounding the heart chamber and a papillary muscle in the chamber.

84. (Previously Presented) The method of claim 68, wherein altering the position of the at least one papillary muscle associated with the valve includes drawing the at least one papillary muscle toward the valve.

85. (New) A method of treating an in situ mitral valve, the method comprising:
positioning a passive device with respect to a heart such that, throughout the cardiac cycle, a portion of the device contacts and passively alters a geometry of heart structure other than leaflets, chordae, papillary muscles, and an annulus associated with the in situ mitral valve, wherein the passive device draws together leaflets of the in situ valve to promote closure of the in situ valve, and wherein positioning the device includes positioning the device so as to alter a position of at least one papillary muscle associated with the valve.

86. (New) The method of claim 85, wherein altering the position of the at least one papillary muscle associated with the valve includes drawing the at least one papillary muscle toward the valve.

87. (New) A method of treating an in situ mitral valve, the method comprising:
positioning a passive device with respect to a heart such that, throughout the cardiac cycle, a portion of the device contacts and passively alters a geometry of heart

structure other than leaflets, chordae, papillary muscles, and an annulus associated with the in situ mitral valve, wherein the passive device draws together leaflets of the in situ valve to promote closure of the in situ valve, and wherein the device includes an elongate member that traverses a chamber of the heart.

88. (New) The method of claim 87, wherein the heart structure includes a wall of a heart chamber.

89. (New) The method of claim 87, wherein altering the geometry of the heart structure includes altering at least one of a transverse radial dimension and vertical dimension of a heart chamber during at least a portion of the cardiac cycle.

90. (New) The method of claim 89, wherein altering at least one of the transverse radial dimension and vertical dimension includes reducing at least one of the transverse radial dimension and vertical dimension.

91. (New) A method of treating an in situ mitral valve, the method comprising:
positioning a passive device with respect to a heart such that, throughout the cardiac cycle, a portion of the device contacts and passively alters a geometry of heart structure, wherein the passive device alters a position of a leaflet of the in situ valve to promote closure of the in situ valve, and wherein positioning the device includes extending at least a portion of at least one elongate member within a chamber of the

heart and anchoring a first end of the at least one elongate member to one of a wall surrounding the heart chamber and a papillary muscle in the chamber.

92. (New) The method of claim 91, wherein a second end of the elongate member contacts the mitral valve, and the first end of the elongate member contacts the wall surrounding the chamber.

93. (New) The method of claim 91, wherein the first end is anchored to the wall surrounding the chamber.

94. (New) The method of claim 91, wherein the elongate member traverses the chamber.

95. (New) A method of treating an in situ mitral valve, the method comprising:
positioning a passive device with respect to a heart such that, throughout the cardiac cycle, a portion of the device contacts and passively alters a geometry of heart structure, wherein the passive device alters a position of a leaflet of the in situ valve to promote closure of the in situ valve, and wherein the device includes an elongate member that traverses a chamber of the heart.

96. (New) The method of claim 95, wherein a first end of the elongate member is anchored to a wall surrounding the chamber.

97. (New) The method of claim 96, wherein a second end of the elongate member contacts the mitral valve.
98. (New) The method of claim 95, wherein the elongate member extends in a plane that is substantially perpendicular to the mitral valve.

REMARKS

In response to the Office Action mailed on April 18, 2005, and further to the Board of Patent Appeals and Interferences' Decision on Appeal dated May 21, 2008, Applicant submits this Amendment together with a concurrently filed Request for Continued Examination (RCE).

In the Office Action, the Examiner rejected claims 64, 66, 67, and 83 under 35 U.S.C. § 102(b) as allegedly being anticipated by Alferness (U.S. Patent No. 5,702,343), and objected to claims 59-62, 68, and 84 as being dependent upon a rejected base claim, but allowable if rewritten in independent form to include all of the limitations of the base claims and any intervening claims. The Examiner made the rejection final.

By this Amendment, Applicant amends claim 60-62 and 83, cancels claim 59, and adds new claims 85-98. Accordingly, claims 60-62, 64, 66-68, and 83-98 are currently pending. Of these claims, claims 83, 85, 87, 91, and 95 are independent.

Applicant gratefully acknowledges the Examiner's indication of the allowability of the subject matter of claims 59-62, 68, and 84. While Applicant does not necessarily agree that the cited reference discloses or suggests the claimed invention as set forth in independent claim 83, solely in the interests of expediting the prosecution of this application, Applicant has rewritten independent claim 83 to substantially include the subject matter of claim 59. In addition, new claim 91 includes certain subject matter of claims 83 and 59. Accordingly, Applicant respectfully submits that independent claims 83 and 91 are in condition for allowance.

Each of claims 60-62, 64, and 66-68 depends from independent claim 83 and is patentable for at least all of the reasons for which independent claim 83 is patentable.

Furthermore, in accordance with the Examiner's indication of claims 68 and 84 being allowable if rewritten in independent form and including all of the recitations of the base claim and any intervening claims, Applicant submits new claims 85 and 86. These claims are patentable because they contain the recitations of the claims identified by the Examiner as allowable. In particular, new independent claim 85 comprises the recitations of claim 68, and new dependent claim 86 comprises the recitations of claim 84.

Insofar as the rejections of claims 64, 66, 67, and 83 may be relevant to the subject matter of new claims 87-90, Applicant submits that claims 87-90 and 92 are also patentable over Alferness for at least the following reasons.

New independent claims 87 and 95 recite a method of treating an in situ mitral valve. The method includes, among other things, positioning a passive device with respect to a heart, "wherein the device includes an elongate member that traverses a chamber of the heart."

Alferness discloses a cardiac reinforcement device (CRD) and method for treating cardiomyopathy. More specifically, Alferness discloses a device and treatment method that provide reinforcement of the cardiac wall during only diastole by applying the device to the epicardial surface of the heart. See, e.g., Alferness, col. 1, ll. 8-14. In one embodiment, the disclosed Alferness device includes a patch that is applied to an external portion of a heart wall. See, for example, Figs. 1 and 2, and col. 3, ll. 40-62. In another embodiment, the disclosed Alferness device includes a jacket "that

circumferentially surrounds the epicardial surface of the heart," as shown in Figs. 3-5 and 7-8. Col. 3, ll. 64-67.

Alferness, therefore, fails to disclose, teach, or otherwise suggest a method of treating an in situ mitral valve, including positioning a passive device with respect to a heart, "wherein the device includes an elongate member that traverses a chamber of the heart," as required by each independent claims 87 and 95.

Accordingly, Applicant submits that independent claims 87 and 95, and the claims dependent on claim 87, are also patentable over the applied prior art.

The Office Action contains characterizations of the claims and the related art with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action.

In discussing the specification and claims in this Amendment, it is to be understood that Applicant is in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification and/or shown in the drawings. Rather, Applicant is entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this Amendment and
charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: July 21, 2008

By: 
Dinesh N. Melwani
Reg. No. 60,670